## Applied Recovery Research on Sand-verbena Moth: A Puget Sound - Georgia Basin Endemic Species

Nick Page\*, Raincoast Applied Ecology

Keywords: aquaculture, invasive species, selectivity, feeding rate

Sand-verbena Moth has only been found at eight sites in the world, all of them in the Puget Sound - Georgia Basin region. The moth requires large patches of a single host-plant (yellow sand-verbena) for population persistence. This habitat is restricted to large sand beaches, spits, and dunes that are uncommon in the Puget Sound. This habitat has been degraded by coastal development and invasive species colonization. It is also affected by the rate and pattern of natural succession. Recovery research has focused on understanding the relationship between Sand-verbena Moth and its host-plant, as well as developing methods for restoring open sand dunes. A variety of vegetation management treatments have been examined in dunes stabilized by Scotch broom and invasive grasses. Initial results indicate that restoring open dunes may be successful, but understanding the disturbance ecology of coastal dunes will be critical for long-term recovery for Sand-verbena Moth.